Abstract

An impulse response matrix of a received signal in a
TDMA communications system is approximated using a plurality of
indirect variables of a linear complex vector. The indirect
5 variables are used for synchronizing to the received signal and
for tracking and frequency offset estimation during successive
samples of the received signal, the samples being equalized in
dependence upon the indirect variables. A demodulated signal
is derived from the equalized received signal samples.
10 Individual synchronization and tracking units, and a single
equalizer, can be provided for a two-antenna receiver.
Tracking errors can be used to adapt a parameter of the
equalizer to reduce interference in the received signal.